

KR4008EN

Video Cassette Recorder



INSTALLATION INSTRUCTIONS

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- REORIENT OR RELOCATE THE RECEIVING ANTENNA
- INCREASE THE SEPARATION BETWEEN THE EQUIPMENT AND RECEIVER
- CONNECT THE EQUIPMENT INTO AN OUTLET ON A CIRCUIT DIFFERENT FROM THAT TO WHICH THE RECEIVER IS CONNECTED
- CONSULT THE DEALER OR AN EXPERIENCED RADIO/TV TECHNICIAN FOR HELP

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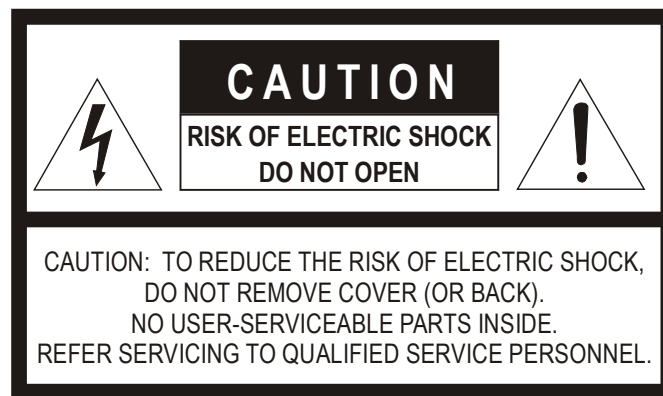
THIS CLASS B DIGITAL APPARATUS MEETS ALL REQUIREMENTS OF THE CANADIAN INTERFERENCE-CAUSING EQUIPMENT REGULATIONS.

CET APPAREIL NUMÉRIQUE DE LA CLASSE B RESPECTE TOUTES LES EXIGENCES DU RÈGLEMENT SUR LE MATÉRIEL BROUILLER DU CANADA.

WARNING

- TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.
- DO NOT INSERT ANY METALLIC OBJECT THROUGH VENTILATION GRILLS.

CAUTION



EXPLANATION OF GRAPHICAL SYMBOLS



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instruction in the literature accompanying the product.

USERS OF THE PRODUCT ARE RESPONSIBLE FOR CHECKING AND COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND STATUTES CONCERNING THE MONITORING AND RECORDING OF VIDEO AND AUDIO SIGNALS. ULTRAK SHALL NOT BE HELD RESPONSIBLE FOR THE USE OF THIS PRODUCT IN VIOLATION OF CURRENT LAWS AND STATUTES.

IMPORTANT SAFEGUARDS

1. **READ INSTRUCTIONS** – All of the safety and operating instructions should be read before the appliance is operated.
2. **RETAIN INSTRUCTIONS** – The safety and operating instructions should be retained for future reference.
3. **HEED WARNINGS** – All warnings on the product and in the operating instructions should be adhered to.
4. **FOLLOW INSTRUCTIONS** – All operating and use instructions should be followed.
5. **CLEANING** – Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning the EXTERIOR CASE ONLY.
6. **ATTACHMENTS** – Do not use attachments not recommended by the product manufacturer as they may result in the risk of fire, electric shock, or injury to persons.
7. **WATER AND MOISTURE** – Do not use this product equipment near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool – or near moist or damp areas.
8. **ACCESSORIES** - Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult and serious damage to the equipment. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions and should use a mounting accessory recommended by the manufacturer. Wall or shelf mounting should follow the manufacturer's instructions and should use a mounting kit approved by the manufacturer.
9. A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn. 
10. **VENTILATION** - Slots and openings in the cabinet and the back or bottom are provided for ventilation and to ensure reliable operation of the equipment and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. Equipment should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation, such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
11. **POWER SOURCES** – This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your product dealer or local power company. For products designed to operate from battery power or other sources, refer to the operating instructions.
12. **GROUNDING OR POLARIZATION** – This product is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
13. **POWER CORD PROTECTION** – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed on them or against them, paying particular attention to cords at plugs and at point of exit from the product. Do not damage the power cord. Damage to the power cord may cause a fire or shock hazard. When unplugging the power cord, hold it by the plug and remove it carefully.
14. **OUTDOOR ANTENNA GROUNDING** – If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges.

IMPORTANT SAFEGUARDS, CONTINUED

15. **LIGHTNING** – For added protection for this product during a lightning storm or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the video product due to lightning and power-line surges.
16. **POWER LINES** – An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
17. **OVERLOADING** – Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
18. **SERVICING** – Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
19. **OBJECT AND LIQUID ENTRY** – Never push objects of any kind into this equipment as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
20. **DAMAGE REQUIRING SERVICE** - Unplug the product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - A. When the power supply cord or the plug has been damaged.
 - B. If liquid has spilled or objects have fallen into the video product.
 - C. If the product has been exposed to rain or water.
 - D. If the product does not operate normally by following the operating instructions, adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
 - E. If the product has been dropped or the cabinet damaged.
 - F. When the video product exhibits a distinct change in performance.
21. **REPLACEMENT PARTS** – When replacement parts are required, be sure that the service technician uses replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
22. **SAFETY CHECK** – Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
23. **HEAT** – The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat. Use only in a well-ventilated area.
24. **FIELD INSTALLATION** – This installation should be made by a qualified service person and should conform to all local codes.
25. **ACCESSORY INPUTS** – Only use dry contact type switches as triggering devices/inputs to the security terminal. Introducing voltage to the event or panic record inputs may cause damage to the recorder as well as the device being connected. EOT (End of Tape) devices must observe polarity and limit DC voltage to 15 volts. Current consumption of an EOT device must be limited to 100mA or less. All connections to the rear screw terminal must be free of an AC component signal and RF noise. Shielded cable should be used for trigger input cable runs over 25 ft. in length.
26. **WALL OR CEILING MOUNTING** – The product should be mounted to a wall or ceiling only as recommended by the manufacturer.

TABLE OF CONTENTS

SECTION 1: INTRODUCTION	1
PRODUCT DESCRIPTION	1
FEATURES	1
ADDITIONAL INFORMATION ABOUT THIS PRODUCT	1
SECTION 2: CONNECTIONS	3
LOCATION OF CONTROLS	3
Front Panel.....	3
Front Panel Display.....	4
Rear Panel Jacks	4
Remote Control	5
CONTROL TERMINAL BOX	7
SECTION 3: OPERATING INSTRUCTIONS	9
BASIC VCR OPERATION AND CONTROLS	9
Loading a Tape	9
Unloading a Tape.....	9
Playing a Tape	9
Rewinding a Tape	10
Fast Forwarding a Tape.....	10
Speed Search with Picture.....	10
Pausing a Tape	10
Controlling Vibration during Still Frame	10
Using Repaired Tapes	10
USING YOUR REMOTE CONTROL.....	10
Installing the batteries	10
Using the remote control to operate your TV	11
Setting your remote control to operate your TV	11
Operating your TV with the remote control	12
SETTING UP YOUR VCR	12
Selecting the On-screen Language	12
Setting the Clock Manually	13
RECORDING – ONE TOUCH RECORDING (OTR).....	14
If you program too much time into the OTR timer	14
How OTR affects other controls.....	14
RECORDING – STANDBY ONE-TOUCH RECORDING (OTR ²)	15
To Cancel OTR ²	16
How OTR ² Affects Other Controls.....	16
RECORDING – USING AUDIO AND VIDEO FUNCTIONS.....	16
Selecting and Adjusting the Audio and Video Functions	16
RECORDING – AUDIO FUNCTIONS.....	17
Audio Functions	17
Audio Monitor (Listen to).....	17
Audio During Normal Recording	17

TABLE OF CONTENTS, CONTINUED

RECORDING – VIDEO FUNCTIONS	18
Video Functions	18
Tape (length).....	18
PerfectTape Select (Play PerfectTape)	18
Counter Zero Stop (Counter zero stop)	18
Repeat Playback (Repeat Play).....	18
PerfectTape®.....	18
Search to blank (Search to blank)	19
TIMER RECORDING - CONVENTIONAL VCR TIMER RECORDING	19
Setting up a Program to Record	19
Canceling a Recording in Progress	21
Changing while Programming.....	21
TIMER RECORDING – QUICK PROGRAM	22
TIMER RECORDING – TIMER RECORDING HINTS	23
Using the VCR before Timer Recording Begins	23
VCR Memory.....	23
If a Tape Runs Out or is Not Loaded	23
Overlapping Recording Times	23
Auto Speed Programming.....	24
Program Caution.....	24
Programs that End on the Day After.....	24
Program Skip Using Menus	24
Program Skip Using the POWER Button.....	25
Changing the Timer Recording Settings.....	25
Canceling a Timer Recording before the Recording Starts	25
Memory Backup	25
ADVANCED PLAYBACK CONTROLS	26
Special Effects	26
Using the FF and REW on the Front Panel to Control the Playback Speed	26
Using ◀◀ and ▶▶ on the Remote to Control the Playback Speed	26
Still Adjustment	26
Double Speed Playback.....	27
ADJUSTING THE TRACKING	27
Automatic Tracking	27
Manual Tracking	27
Slow Tracking.....	27
TIME COUNTER	28
Setting the Counter	28
SEARCHING TECHNIQUES.....	28
Quick Search (CM Skip)	28
Speed Search	29
Counter Zero Stop	29
Index Search.....	30
Automatic Index Marks	30
Manual Index Marks.....	30
Repeat Playback.....	31
DISPLAYING THE TIME GAUGE AND THE REMAINING TIME	31
DISPLAYING THE CURRENT TIME	32

TABLE OF CONTENTS, CONTINUED

CUSTOMIZE CHOICES MENU	32
Video Mute	33
Auto Power Save (Auto Off)	33
PerfectTape®	33
Setting up PerfectTape®	33
Using PerfectTape® Automatically	34
Using PerfectTape® Manually	34
Rental Xpress.....	34
VCR-B SIGNALS	35
To program the KR4008EN and remote to VCR-B.....	35
To reprogram the KR4008EN and remote to VCR-A.....	35
LOCK MODE	35
SECTION 4: TROUBLESHOOTING AND MAINTENANCE.....	36
TROUBLESHOOTING	36
PREVENTIVE MAINTENANCE	36
TROUBLESHOOTING – TROUBLE CHECKS	37
SPECIFICATIONS	38

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SECTION 1: INTRODUCTION

PRODUCT DESCRIPTION

The KR4008EN video cassette recorder is an advanced, high-quality audio/video recorder for video surveillance in casino applications. The KR4008EN provides high-performance black-and-white and color video quality. It features precise tape speed control similar to that of a jog dial, allowing for multiple frame-by-frame speeds in forward or reverse, along with precision gap heads which maintain a flat video bandwidth and improve resolution.

FEATURES

Features of the KR4008EN video cassette recorder include:

- Program conflict warning
- Advanced playback controls
- Automatic tracking
- Alfa 500 Precision High Speed Mechanism with 500x rewind/fast forward speed
- Multiple searching techniques
- Repeat playback
- Lock mode
- EP/SP indicator
- Remote control (batteries included)

ADDITIONAL INFORMATION ABOUT THIS PRODUCT

The KR4008EN VCR has been modified for use as a casino deck operated remotely via a computer control cable. Some features of the VCR, such as the tuner, have been disabled.

The remote control included with this VCR is a universal-type remote. When used with the KR4008EN video cassette recorder, some buttons on the remote control are not needed and will not function.

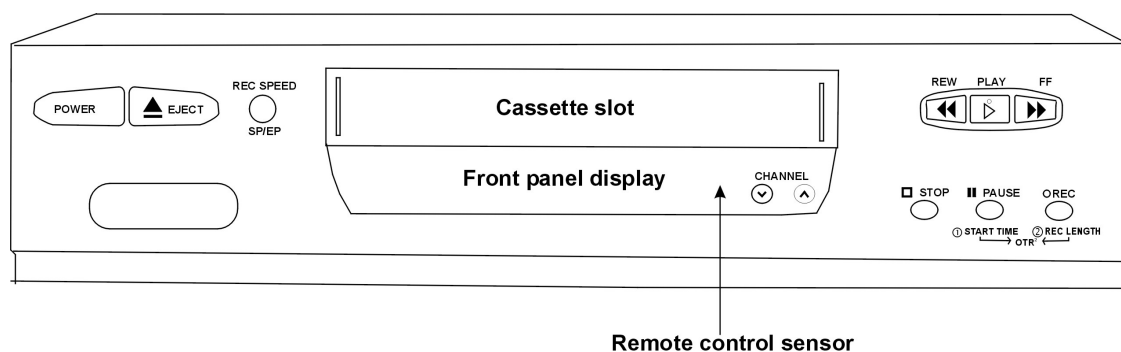
The remote control can also be programmed for use with standard televisions.

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SECTION 2: CONNECTIONS

LOCATION OF CONTROLS

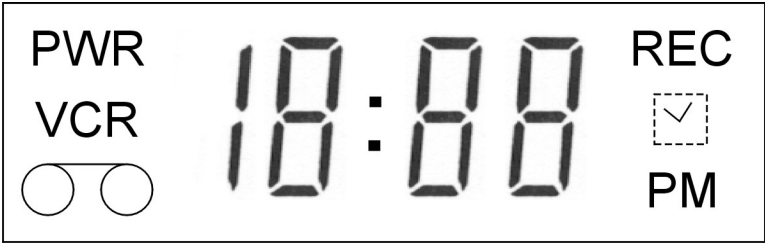
Front Panel



	POWER	Turns the VCR on or off. If you have programmed your VCR to record, turn off the VCR.
▲	EJECT	Ejects a tape.
	REC SPEED SP/EP	Changes the recording speed. (SP is standard play; EP is extended play.)
	Cassette slot	Insert the video cassette tape here.
	Front panel display	See next section.
	Remote control sensor	Receives signals from a remote control. If using a remote control, do not block this sensor.
	CHANNEL	Changes channels. Adjusts tracking and picture vibration.
◀◀	REW	Rewinds a tape or reverse searches.
▶	PLAY	Plays a tape. Resumes normal playback from special effects.
▶▶	FF	Fast forwards a tape or fast forward searches.
□	STOP	Stops a tape.
	PAUSE/① START TIME	Pauses a tape when recording. Freezes a frame when playing a tape. Sets the start time in OTR ² recording.
●	REC/② REC LENGTH	Records to the end of the tape by pressing once. Sets the recording time for OTR by pressing repeatedly.

LOCATION OF CONTROLS, continued

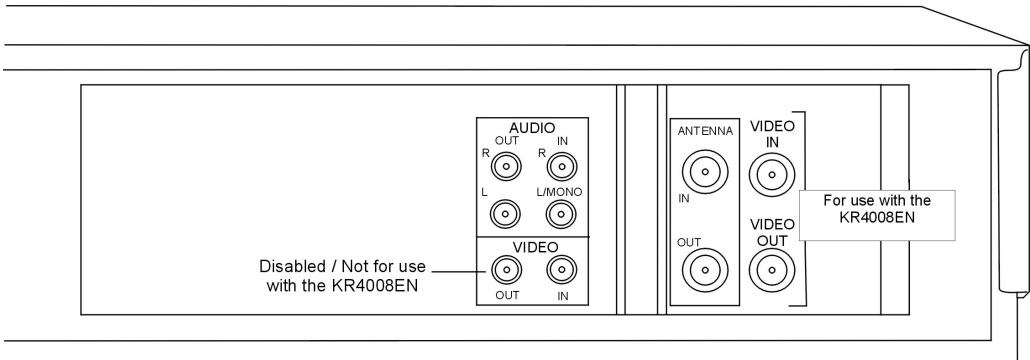
Front Panel
Display



Recording
Speed
indicator

PWR	Power light	Lights up when the power is on.
VCR	VCR light	Indicates that the picture is controlled by the VCR.
	Cassette light	Lights up when a cassette is in the VCR.
	Time display	Displays: - current time - OTR and OTR² timer
REC	Record light	Lights up when the VCR is recording. Flashes when the VCR is in recording pause mode.
	Programmed recording light	Lights up when VCR is off and it is programmed to record.
PM	PM light:	Lights up when the current time or start time of OTR ² is in the afternoon. Turns off when it is in the morning.
	Recording Speed Indicator	LED lights when the recorder is in Extended Play (EP) mode.

Rear Panel
Jacks

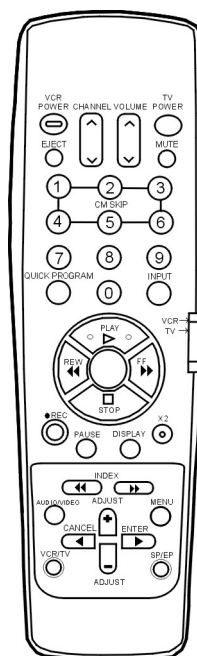


AUDIO INput and OUTput jacks	Red and white jacks for receiving (IN) and sending (OUT) audio signals. Red signifies the right channel and white signifies the left channel. Stereo audio cables are also color-coded red and white. If you are receiving or sending a mono (non-stereo) signal, you should use only the left (white) terminal.
VIDEO INput and OUTput jacks	Yellow jacks for receiving (IN) and sending (OUT) video signals to a monitor or from another VCR.
ANTENNA IN and ANTENNA OUT jacks	These jacks are disabled for the KR4008EN.

LOCATION OF CONTROLS, continued

Remote Control

	VCR POWER	Turns the VCR on or off. If you have programmed the VCR to record, you need to turn the VCR off.
	EJECT	Ejects a tape.
	CHANNEL	Selects next higher or lower channel in the VCR's channel memory.
	VOLUME	Raises and lowers the sound of the TV. (Operates the TV only.)
	TV POWER	Turns the TV on or off. You need to program your remote to operate your particular brand of television.
	MUTE	Turns off the TV sound. Press again to restore the TV sound to its previous volume. (Operates the TV only.)
	Number buttons	Selects TV stations. Sets quick search (CM skip) time.
	QUICK PROGRAM	Goes to Program to record menu. Exits the programming screen.
	INPUT	Select between the antenna and any other video equipment that may be connected.
	PLAY	Plays a tape.
	STOP	Stops a tape.
	REW	Rewinds a tape or reverse searches.
	FF	Fast forwards a tape or fast forward searches.
	VCR/TV slide switch	Operates the VCR when set to the VCR position, the TV when set to the TV position. You need to program your remote to operate your particular brand of television.
	REC	Starts recording. While recording, adds manual index mark.
	PAUSE	Pauses a tape when recording. Freezes a frame when playing a tape.

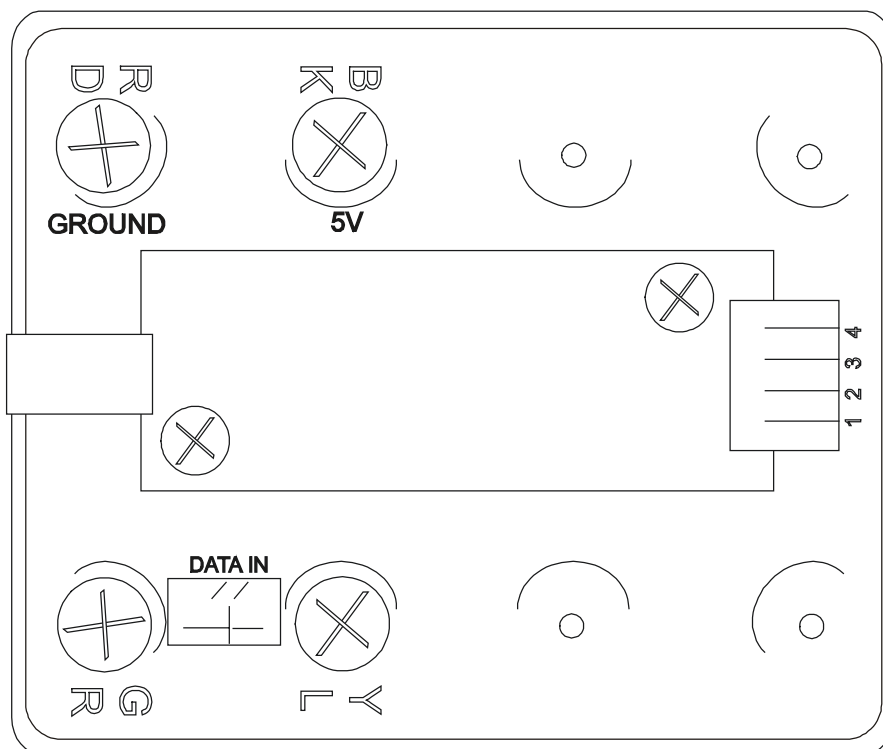


LOCATION OF CONTROLS, continued

**Remote
Control,
continued**

	DISPLAY	Displays on the monitor: • Time elapsed on the tape • Time left on the tape, current time • Channel number and audio reception mode • Audio channel(s) selected • Source supplying the VCR with a signal • If the VCR is stopped, playing, or recording • Turns on and off Lock Mode
	X2	Use double speed playback when playing a tape.
	INDEX	Begins index search forward and backward. Controls the playback speed of a tape.
	AUDIO/VIDEO	Selects the audio and video settings to be adjusted.
	MENU	Displays the menu. Exits the menu.
	CANCEL	Cancels menu selections. Resets the counter display to "0h00m00s."
+, -	ADJUST	Selects and adjusts menu selections.
	ENTER	Enter menu selections.
	VCR/TV	Switches between the VCR's picture and the TV's tuner. Tuner has been disabled.
	SP/EP	Changes the recording speed. (SP is standard play; EP is extended play.)

CONTROL TERMINAL BOX



Control Wires

Orange	(ground)	connects to
Orange/White	(5V)	connects to
Blue/White	(cathode)	connects to
Blue	(anode)	connects to

Terminal Box

Pin

RD	(4)
BK	(3)
YL	(2)
GR	(1)



IMPORTANT: Retain this sheet for future reference. Control terminal box diagram and instructions are specific to this particular VCR. Control wires may vary between individual units.

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SECTION 3: OPERATING INSTRUCTIONS

BASIC VCR OPERATION AND CONTROLS

Loading a Tape

Tapes can be loaded into your VCR as long as the VCR is plugged in. Even when the VCR POWER is OFF, loading a tape will automatically turn the VCR ON. Use only tapes that have a VHS label.

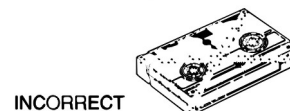
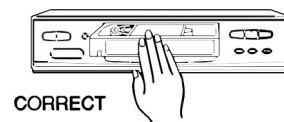
1. Hold the tape so that the long narrow edge with the contents label faces you. The other edge is hinged and should face the VCR. The plastic window that shows the videotape should face up.
2. Gently insert the tape evenly into the cassette slot until the VCR automatically takes it in.

If the VCR will not automatically take the tape in, press EJECT and try again.

Your VCR will eject the tape if it is loaded improperly.

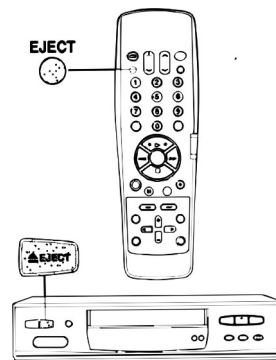
If the VCR ejects the tape:

- remove the tape
- check to see that the contents label is facing you
- check to see that the geared tape reels are facing down
- wait a few seconds and try again.



Unloading a Tape

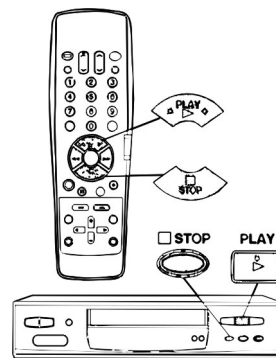
1. Press EJECT on the front panel. (If the VCR power is OFF, the VCR will turn ON, eject the tape, and then turn OFF again.)
2. Remove the tape.



Playing a Tape

Press PLAY on the front panel of the VCR or the remote control. The VCR will automatically play the tape at the correct speed. When the VCR reaches the end of the tape, it will automatically rewind to the beginning of the tape and stop.

You can stop playing by pressing STOP.



BASIC VCR OPERATION AND CONTROLS, continued

Rewinding a Tape

While the tape is stopped, press REW on the front panel or on the remote control.

Fast Forwarding a Tape

While the tape is stopped, press FF on the front panel.

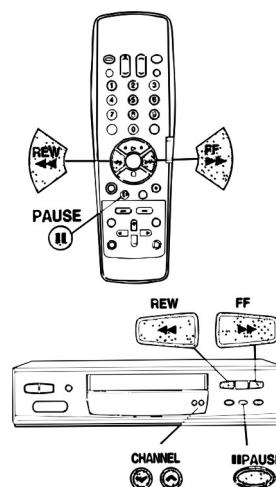
Speed Search with Picture

While the tape is playing, press FF for forward speed search with picture or press REW for reverse speed search. See further instructions for additional information on searching techniques.

Pausing a Tape

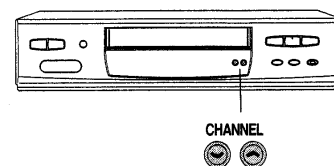
While the tape is playing, press PAUSE to freeze the picture on the screen. (Press PAUSE a second time to return to normal play.)

If you leave the VCR in pause mode for more than 5 minutes, the VCR will automatically stop to prevent damage to the tape.



Controlling Vibration during Still Frame

If the picture vibrates during still frame, press the CHANNEL buttons on the front panel until the picture is steady.



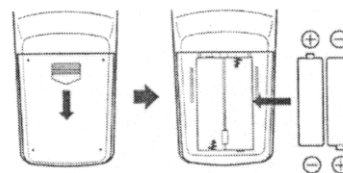
Using Repaired Tapes

We recommend that you take any broken or torn tapes to a professional for repair. If you repair a torn tape with improper materials, you could damage your VCR when you play the tape.

USING YOUR REMOTE CONTROL

Installing the batteries

1. To remove the back cover, press the ridged area gently, then push the cover in the direction of the arrow and lift.
2. Load 2 "AA" batteries, making sure the polarities (+) and (-) are correct. This is marked inside the battery compartment.
3. Set the VCR/TV slide switch on the remote control. For use with the KR4008EN (or other) VCR, slide the switch to the VCR setting. For use with a TV, slide the switch to the TV setting.



USING YOUR REMOTE CONTROL, continued

Using the remote control to operate your TV

The remote control can operate many of the frequently-used functions of your TV. You only need one remote to operate both your VCR and TV. (Default setting is code button 1.)

Setting your remote control to operate your TV

1. Turn off your TV.
2. Set the TV/VCR slide switch to the TV position.
3. While pressing and holding the SP/EP button, press the code button listed that corresponds to the brand of your TV.
4. Press TV POWER on the remote control. Once your TV has turned on, your remote is set up to operate your brand of TV.

If your TV does not turn on, repeat step **3** using the next code listed for the brand of your TV.

If none of the codes listed for the brand of your TV work, then repeat step **3** several times using a different code button until one works. The possible code buttons are: 0, 1-9, MUTE, VOLUME $\wedge$, $\vee$, CHANNEL $\wedge$, $\vee$, and INPUT.

You do not need to perform this set-up again until you change the batteries, set up your remote for another brand of television, or you get a new TV.

Once you have correctly set your remote control to operate your TV, you will be able to use the TV POWER, CHANNEL, VOLUME, and number buttons to operate your TV.

Brand of TV	Code Buttons
Mitsubishi	1, 2, 3
Fisher	0
GE	VOLUME $\wedge$
Goldstar	2, 9
Hitachi	8
JVC	MUTE
Magnavox	4
NEC	2, 9
Panasonic	CHANNEL $\wedge$, $\vee$
Pioneer	6
Philips	4
Proscan	VOLUME $\wedge$
Quasar	CHANNEL $\vee$
RCA	VOLUME $\wedge$
Sanyo	0
Sharp	3, 5
Sony	VOLUME $\vee$
Toshiba	7
Zenith	INPUT



IMPORTANT: Because of variations among models, some or all buttons may not work, or they may operate different functions than expected for your particular TV. If this occurs, you may need to use your TV remote control.

Sometimes manufacturers will change the remote control codes for their products or they will use more than one code. If this is the case, your remote may not be able to control your TV.

When you replace the batteries in your remote, the remote may return to its initial setting (code button 1). Repeat the steps above to reset your remote control. If you enter a new code, the previous code will be erased.

USING YOUR REMOTE CONTROL, continued

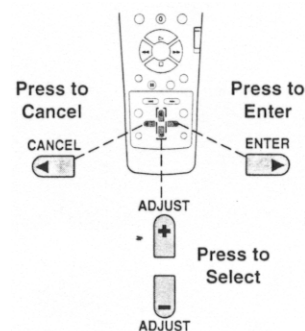
Operating your TV with the remote control

1. Set the VCR/TV slide switch to the TV position.
2. Point the remote control towards the TV and press the desired buttons. To change to control the VCR, set the VCR/TV slide switch to the VCR position.

SETTING UP YOUR VCR

Your VCR comes with an on-screen operating system. This system is designed to simplify the operation of your VCR with clear, understandable language and design.

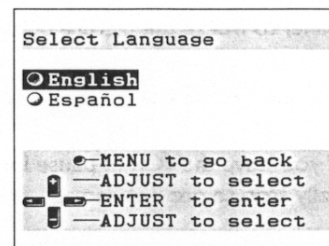
When using the on-screen menus, use the ADJUST buttons to move the highlight bar up or down and to change the setting of selected features. Press the ENTER button to enter a selection or adjustment. Press the CANCEL button to cancel or clear a setting.



Selecting the On-screen Language

You can set your VCR to display on-screen messages, menus, and functions in English or Spanish. You will do this the first time you use the menus or set any audio and video functions.

1. Make sure you are viewing the picture coming from your VCR. Press MENU on the remote control. If this is the first time the menus have been used, you will see the menu for selecting the on-screen language.
2. Press ADJUST buttons on the remote control to highlight the desired language.
The ADJUST + button moves upward.
The ADJUST – button moves downward.
3. Press ENTER on the remote control. The menu will change to the **VCR Main Menu**.
4. Press MENU to exit the menus.



IMPORTANT: The **Select Language** menu is unique. While all other menus can be accessed at almost any time, the **Select Language** menu will not automatically appear after it is first set. To see the **Select Language** menu, press the POWER button for about 8 seconds and then follow the procedure above. The **Select Language** menu will also appear after an extended power failure.

SETTING UP YOUR VCR, continued

Setting the Clock Manually

1. Press MENU on the remote control.
You will see the **VCR Main Menu**.
2. Press the ADJUST buttons to select First Time Set-Up.
Press ENTER. **First Time Set-Up** menu will appear.
Press the ADJUST buttons to select *Set the Clock*.
Press ENTER.
3. You will see the **Set the Clock** menu and *Auto Clock Set* will be highlighted. Press the ADJUST buttons to select OFF. Press ENTER.
4. *Daylight Savings* will be highlighted.
Press the ADJUST buttons to select ON or OFF.

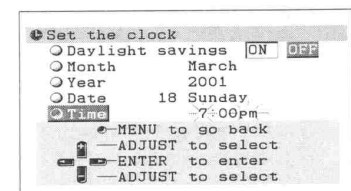
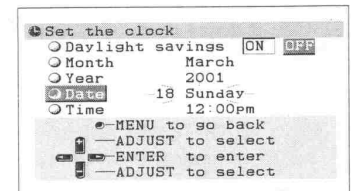
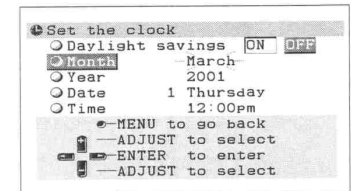
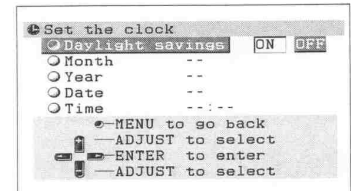
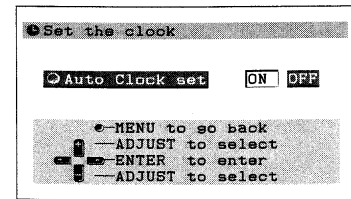
If you are currently following daylight savings, select ON; otherwise, select OFF. Press ENTER.

5. Press the ADJUST buttons until the correct month appears on screen. Press ENTER.

Press the ADJUST buttons to set the current year.
Press ENTER.
6. Press the ADJUST buttons to set the date. Press ENTER.
7. The hour numbers and the am/pm indicator will be blinking. Press the ADJUST buttons to set the hour and am/pm at the same time. Pressing ADJUST + moves the clock *forward*. Pressing ADJUST – moves the clock *backward*. Press ENTER.
8. Press the ADJUST button to set the minutes.
When you have set the correct time, press ENTER.
First Time Set-Up menu will appear and the clock will start running.
9. Press MENU twice to turn off the menus.

You can adjust the daylight savings time manually.
When *Daylight Savings* is highlighted, press the ADJUST buttons to select ON or OFF.

If you select ON, the VCR will set the clock forward one hour.
If you select OFF, the VCR will set the clock back one hour.

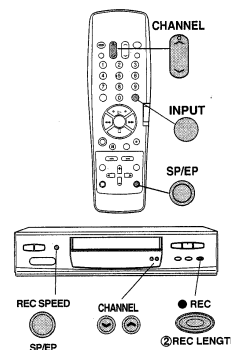


IMPORTANT: Any time you adjust this setting, check your programmed recordings to be sure they are set to the correct times.

RECORDING – ONE TOUCH RECORDING (OTR)

One-Touch Recording (OTR) is a way to begin recording immediately and have your VCR stop recording and turn off automatically after your program is over.

1. Load a tape with its erasure prevention tab intact into the VCR.
2. Set the speed at which you would like to record by pressing SP/EP on the remote control or REC SPEED on the front panel. The selected speed will be displayed on the monitor.
3. Press REC/⌚REC LENGTH on the front panel twice. The first time you press the button, recording will begin. The second press of the same button adds 30 minutes to the OTR timer, displayed on the front panel.
4. Press REC/⌚REC LENGTH for each additional 30 minutes you want to add to the OTR timer, up to 4 hours. If you press the button 10 times, you will see “End” on the front panel display. The VCR will record until the end of the tape. If you press the button an eleventh time, the VCR will resume normal manual recording.



The OTR timer will begin to count down backwards. When it reaches zero, the VCR will stop recording and turn off.

If you program too much time into the OTR timer

Continue pressing REC/⌚REC LENGTH. After the “End” point, you can start over from zero, adding time in 30 minute intervals.

How OTR affects other controls

If you press PAUSE during OTR, the VCR will pause recording but the OTR timer continues to count down.

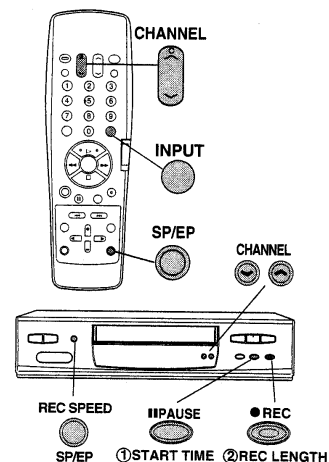
Press PAUSE again to resume recording from the record-pause mode. Pressing the REC/⌚REC LENGTH button will not resume your recording.

If you press STOP during OTR, you erase the OTR programming.

RECORDING – STANDBY ONE-TOUCH RECORDING (OTR²)

Standby One-Touch Recording (also called OTR²) is a programming method to begin recording within the next 24 hours and record in 30 minute intervals. Before you use OTR², make sure the clock has been set correctly.

1. Load a tape with its erasure prevention tab intact into the VCR.
2. Set the speed at which you would like to record by pressing SP/EP on the remote control or REC SPEED on the front panel. The related speed will be displayed on the monitor.
3. Press PAUSE/①START TIME on the front panel to set the time when you wish recording to start (within the next 24 hours). The start time is displayed on the front panel. The first time display is the next half-hour increment from the current time. For example, if it is currently 2:15, 2:30 (the next half-hour increment) will be displayed. Similarly, if it is currently 2:40, 3:00 (the next half-hour increment) will be displayed. Each time you press the button, the start time is delayed by 30 minutes.
4. Press REC/②REC LENGTH for each additional 30 minutes you want to add to the OTR² timer, up to 4 hours. If you see "End" on the front panel display, the VCR will record until the end of the tape.



After 30 seconds, the power will turn off and the programmed recording light will be lit. The VCR will automatically turn on at the OTR² start time and recording will begin. When the OTR² timer reaches zero, the VCR will stop recording and turn off automatically. If the end of the tape is reached before OTR² is finished, the VCR will stop and the power will turn off.



IMPORTANT: Other programs you have set to record may be erased if:

- the start times are before the OTR² start time.
- conflicts with the OTR²
- starts within one minute or less after the OTR² finishes.

If you turn the power on while your VCR is in stand-by for the OTR², the OTR² programming will be erased.

RECORDING – STANDBY ONE-TOUCH RECORDING (OTR²), continued

To Cancel OTR²

- Turn the power OFF while you are programming the timer.
- Turn the power ON if you have finished programming the timer.

How OTR² Affects Other Controls

If you press REC/ⓈREC LENGTH on the front panel during OTR² recording, 30 minutes will be added to the OTR² timer.

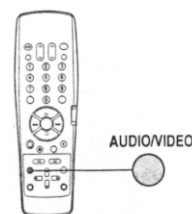
If you press STOP during OTR² recording, you erase the OTR² programming.

RECORDING – USING AUDIO AND VIDEO FUNCTIONS

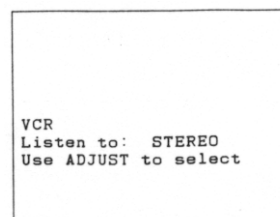
The audio and video function menus allow you to set things such as listening to the stereo track of your recording, or setting the tape length to have the remaining time display function work properly. The VCR will display the functions and settings on your monitor. The first section describes the functions. The next section tells you how to adjust the functions.

Selecting and Adjusting the Audio and Video Functions

1. Press AUDIO/VIDEO on the remote control to see the function menu.
2. Press AUDIO/VIDEO repeatedly until the function you want to adjust appears.
3. Press the ADJUST buttons on the remote to adjust the setting.



The functions will disappear if you do not press any buttons for 5 seconds.



IMPORTANT: The audio and video function menus do not appear:

- When the VCR menu is displayed
- During special effects playback

Tape function does not appear during playback.
Play PerfectTape is displayed only during playing.

PerfectTape displays only when a tape with its erasure tab intact is loaded and the VCR is stopped.

RECORDING – AUDIO FUNCTIONS

Audio Functions

- Audio monitor (listen to)
- Normal record (record)

Audio Monitor (Listen to)

This function allows you to listen to the various audio tracks that your VCR is capable of recording.

- Choose **Stereo** to listen to both stereo channels.
- Choose **L** to listen to the left channel of a stereo track.
- Choose **R** to listen to the right channel of a stereo track.
- **Mono** track is lower in quality than the others. The audio monitor is automatically set to **Mono** if you are watching a tape that was not recorded in VHS Hi-Fi. Set the audio monitor to **Mono** to hear SAP signal recorded on the mono track of a Hi-Fi tape.



IMPORTANT: If you have your VCR connected to a **surround sound system**, set the audio monitor to **Stereo**. Surround sound requires both left and right channels to create the rear channel effects.

While the VCR is not playing a tape, you will see the following displays on the monitor for 3 seconds when you change the channel or press DISPLAY.

If you change the channel to:	Display
Stereo broadcast	Stereo
SAP broadcast	SAP
Stereo and SAP	Stereo + SAP

While the VCR is playing a tape, you will see the following displays on the monitor for 4 seconds when you change the channel or press DISPLAY.

The audio monitor you listen to	Display
Stereo	Audio Stereo
L	Audio L
R	Audio R
Mono	Audio Mono

Audio During Normal Recording

When your VCR is recording, it actually records the audio portion of a program twice: once on the stereo Hi-Fi tracks and once on the mono track.

RECORDING – VIDEO FUNCTIONS

- Video Functions**
- Tape (length)
 - PerfectTape Select®
 - Counter zero stop
 - Repeat playback
 - PerfectTape®
 - Search to blank

Tape (length)

Adjust this function to ensure the accuracy of the Remaining Time display.

The remaining time function does not work properly with a tape that is less than 30 minutes long.

Length of Tape	Use Setting
2 hours long or less (T-30 through T-120)	T-120
160 minutes (T-160)	T-160
180 minutes (T-180)	T-180
200 minutes (T-200)	T-200
210 minutes (T-210)	T-210

PerfectTape Select (Play PerfectTape)

This function turns on the PerfectTape Select circuitry which automatically maximizes picture quality when playing a worn or poor quality tape. Set the switch to **Soft** to soften the picture, set it to **Sharp** to sharpen it, and set it to **Normal** when you do not want to use this feature.

Use **Normal** on new or high quality tapes.

If it is set to **Auto**, the VCR will automatically select the ideal setting of **PerfectTape Select** depending on the condition of the tape.

Counter Zero Stop (Counter zero stop)

The function is used to automatically fast forward or rewind to “0h00m00s” and stop the tape. See the Searching Techniques section for more information on this function.

Repeat Playback (Repeat Play)

Use this function to repeatedly play a section of tape between two index marks. See the Searching Techniques section for more information on this function.

PerfectTape® PerfectTape function allows you to test the quality of video tapes you will record on. After each test, the VCR adjusts its circuitry in order to make the best possible recording on your tape. See the Searching Techniques section for more information on this function.

RECORDING – VIDEO FUNCTIONS, continued

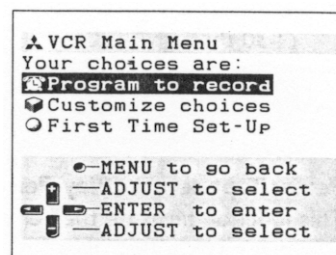
Search to blank
(Search to blank) Use this function to search the beginning of the blank section of the tape.

TIMER RECORDING - CONVENTIONAL VCR TIMER RECORDING

You can schedule up to 8 recording events within a one-month period.
Clock must be set before any timer recordings can be performed.

Setting up a Program to Record

1. Load a tape with its erasure prevention tab intact into the VCR.
2. Press MENU. **VCR Main Menu** appears on your screen. Use the ADJUST buttons to select *Program to record*. Press ENTER.

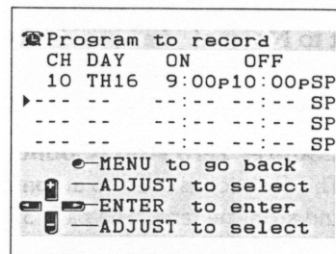


IMPORTANT: The KR4008EN only records from the video input jacks. Only one video input jack can be used at a time.



IMPORTANT: If you have already programmed 8 recording events, *Program memory is full* will appear on your screen for 3 seconds, and then the Recap screen will appear. Use CANCEL to erase an entry before you can add another one.

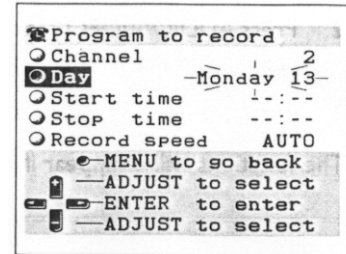
3. **Program to record** menu appears. Press ENTER.
4. *Day* will flash. Press the ADJUST buttons to choose the day on which you want to record. (For example, Monday the 13th.) Your choices are:
 - A single day up to one month away
 - Every day from Monday through Friday. To program, press the ADJUST buttons until "Monday-Friday" appears.
 - The same day every week. To program, press the ADJUST buttons until "Every" and the desired day of the week appears.



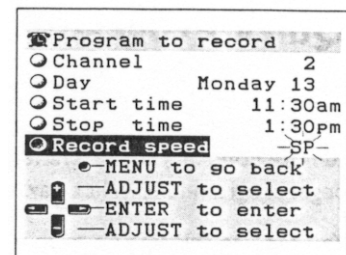
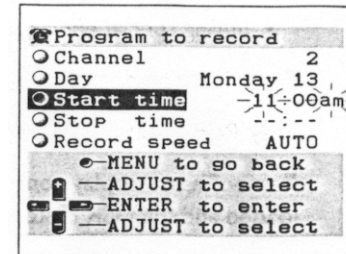
Recap screen

CONVENTIONAL VCR TIMER RECORDING, continued

5. Press ENTER once you have made your choice.



6. The hour numbers of the start time will flash.
Press the ADJUST buttons to set the hour when recording is to start. Press ENTER.
7. The minute numbers of the start time will flash.
Press the ADJUST buttons to set the minutes when recording is to start. Press ENTER.
8. Set the stop time the same way as the start time, using steps 5 and 6.
9. Press the ADJUST buttons to set the recording speed.
SP = standard play; EP = extended play; AUTO = auto.
Auto speed programming is discussed in the Timer Recording Hints section.

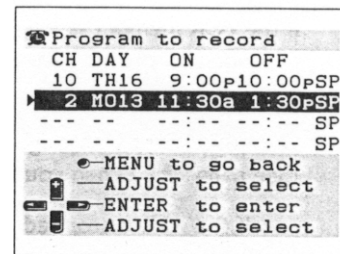


IMPORTANT: If you press ENTER when you set the timer recording incompletely, *Current Program is not completed* will appear on your screen.

If two programmed recording times overlap, *VCR is already programmed for that time* will display on your screen for about 3 seconds and then the Recap screen will appear. The program you have just set will be highlighted in magenta and flash for 3 seconds. The start and stop time of the overlapped program will be highlighted in cyan color. You will need to erase one of them.

CONVENTIONAL VCR TIMER RECORDING, continued

10. The programmed memory will appear on the Recap screen.
11. To program additional recording times, select an empty program line by pressing ADJUST buttons. Press ENTER. The **Program to record** menu will appear. Continue the programming procedure from step 3.
12. When you are finished with all programming, turn the VCR power OFF and make sure that the programmed recording light is lit.



Recap screen



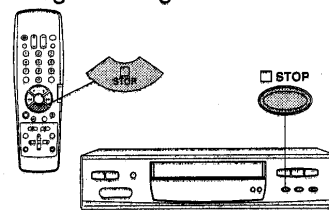
IMPORTANT: Only 4 of the 8 program lines appear on the Recap screen at any one time. To see additional program lines, press the ADJUST buttons to scroll the lines on the screen.

Canceling a Recording in Progress

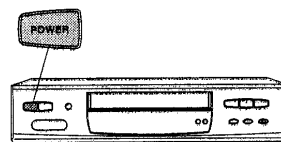
There are two ways to stop a recording in process:

- Press STOP on the front panel or on the remote control. The recording stops but the program is not cancelled. Therefore, if you press REC, the recording will start again.
- Press POWER on the front panel. The recording stops and the program is cancelled.

Programming not cancelled



Programming cancelled

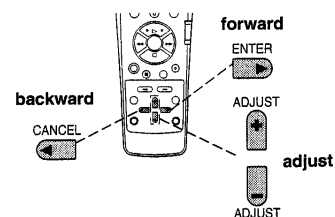


Changing while Programming

To change one of your settings (such as start time) while you are programming:

- Press ENTER to move forward or CANCEL to move backward through the program list.
- Then use the ADJUST buttons to change the settings.

You will cancel the entire program if you press CANCEL while the channel number is flashing.

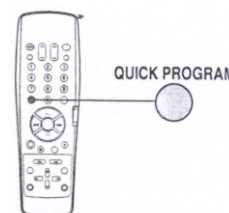


TIMER RECORDING – QUICK PROGRAM

The Quick Program feature simplifies the process of programming your VCR to record. When you press QUICK PROGRAM on the remote control, you will immediately see the **Program to record** menu and can begin programming right away.

You can use this feature even when the VCR is stopped, playing, fast forwarding, rewinding, or off. (Quick Program does not work while using OTR².)

1. Press QUICK PROGRAM on the remote control.
If the VCR is OFF, it will turn ON. After tuning your TV to the correct input, **Program to record** menu will appear.

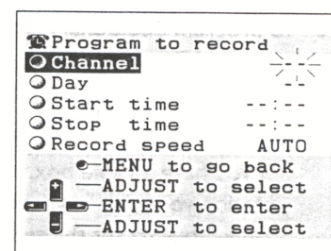


IMPORTANT: If the VCR memory is full, *Program memory is full* will appear for 3 seconds, and then the Recap screen will appear. Use CANCEL to erase an entry before you can add another one.

2. Complete steps 3 through 9 of Conventional VCR Timer Recording. When you have finished, press QUICK PROGRAM again.

If the VCR is stopped, it will turn off and be ready to record your program at a later time.

If the VCR is playing, fast forwarding, or rewinding, the menus will turn off, but the VCR power will remain on.



3. When you are finished with all programming, make sure the VCR is turned OFF and the programmed recording light is lit before the recording time.

Recap screen

Program to record					
CH	DAY	ON	OFF		
2	MO	13	11:30a	1:30p	SP
10	TH	16	9:00p	10:00p	EP
7	E-WE	8:00a	9:00a		EP
12	FR	17	5:30p	5:45p	EP
8	TU	21	11:00p	0:30a	SP
13	M-F	7:00p	7:15p		EP
15	SA	1	8:00p	9:00p	EP
46	SU	19	7:00a	9:00a	SP



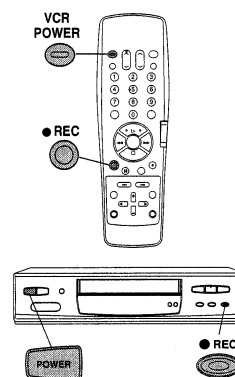
IMPORTANT: If you press QUICK PROGRAM, but the clock is not set, **Set the clock** menu will appear. Set the clock manually.

TIMER RECORDING – TIMER RECORDING HINTS

Using the VCR before Timer Recording Begins

To use the VCR before timer recording begins, press POWER on the remote once. This turns the programmed recording light off and the VCR on. If you use POWER on the front panel for this purpose, press it twice. Pressing it once turns off the programmed recording light; pressing it again turns the VCR on.

When you are finished using the VCR, turn the VCR power off again. Make sure the programmed recording light is back on.



VCR Memory

After a program has been recorded, the VCR memory of that program is cleared (unless you have scheduled the VCR to record the program every day or every week.)

If there is already a program in the VCR's memory, you will see the Recap screen when you bring up the menus for programming to record (unless you are programming with the QUICK PROGRAM.) If the VCR's memory is full, *Program memory is full* will appear on the screen. If so, you must erase a program before you can enter a new one.

If a Tape Runs Out or is Not Loaded

If a tape runs out during timer recording, the VCR ejects the tape and the programmed recording light and the cassette light will flash. Load a new tape and press REC. Recording will resume.

If you forget to load a tape, the programmed recording light and the cassette light will flash when you turn the VCR power off. (A tape without an erasure tab will be ejected. To correct this, load a tape with its erasure tab intact and turn off the VCR.)

Overlapping Recording Times

Do not overlap the recording times you enter into the VCR. If you set two programmed recording times that overlap, *VCR is already programmed for that time* will appear on your screen.

Remember that the VCR will record over the next section of tape. **If you want to save a tape**, remove it and instead use a different tape for a new recording.

Your VCR will not record over a tape that has the erasure prevention tab removed. All rental movies have this tab removed, so they are safe from being accidentally erased.

TIMER RECORDING – TIMER RECORDING HINTS, continued

Auto Speed Programming Use auto speed programming if you want to record as much of the program as possible in standard play (SP) mode, but you want the VCR to automatically switch to extended play (EP) if there's not enough tape left.

Auto speed programming is only available for one program. In the first slot, the recording speed default is AUTO.

Make sure that the Tape video function matches the length of tape you are using. See **Selecting and adjusting the audio and video functions** section of this manual.

At the point where the recording mode changes from standard play (SP) to extended play (EP), some noise may be in the picture or sound when playing the tape.

Program Caution

If your VCR is set to record, but the power is still ON within 3 minutes before timer recording starts, this screen will appear to remind you to turn off the VCR.

If the VCR is still turned on 12 seconds before the start time of the recording, that timer recording will be canceled.

program caution

REC in 3 min
Turn off VCR

Programs that End on the Day After

If you want to start a recording at 11:00pm and end it at 2:00am the next day, simply set the start time to 11:00pm on the recording start day and the end time to 2:00am. There is no need to change the day of the week.

Program Skip Using Menus

Sometimes you may want to skip one day of a timer recording but do not want to erase it. Program skip will prevent the recording, for that day only, of a program you have scheduled to record every day or every week.

1. Press MENU on the remote control. Your VCR will turn on and **VCR Main Menu** will appear. Press the ADJUST buttons to select **Program to record**. Press ENTER.
2. *Recap screen* will display for 4 seconds. While this screen is displayed, press the ADJUST buttons to place the cursor arrow next to the program you wish to skip.
3. Press STOP. The cursor arrow will change to an **X**.
4. Press MENU twice to turn off the menus.

To resume recording every day or every week, change the **X** to the cursor arrow by following steps 1 to 4 again.

```

Program to record
CH DAY  ON  OFF
 2 MO13 11:30a 1:30pSP
10 TH16  9:00p10:00pEP
▶ 2 M-F  8:00a 8:30aSP
--- --  --- --  --- --  SP
Use STOP to skip on/off
  --ADJUST to select
  --ENTER to enter
  --ADJUST to select
  
```

```

Program to record
CH DAY  ON  OFF
 2 MO13 11:30a 1:30pSP
10 TH16  9:00p10:00pEP
X 2 M-F  8:00a 8:30aSP
--- --  --- --  --- --  SP
Use STOP to skip on/off
  --ADJUST to select
  --ENTER to enter
  --ADJUST to select
  
```

TIMER RECORDING – TIMER RECORDING HINTS, continued

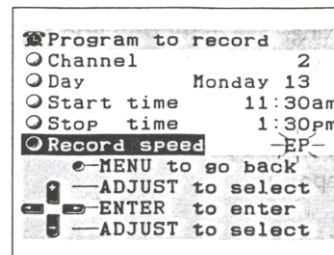
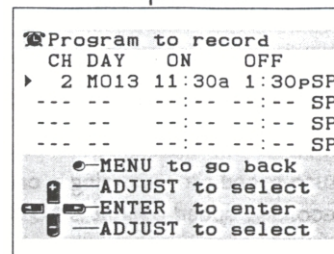
Program Skip Using the POWER Button

If you have entered only one program into your VCR's memory, you can skip the program without going into the VCR's menus. Simply press POWER on the front panel once. The programmed recording light will turn off, and the program will be skipped. If you decide not to skip the program, press POWER on the front panel twice; the programmed recording light will light up again.

Changing the Timer Recording Settings

1. Press MENU on the remote control. Your VCR will turn on and **VCR Main Menu** will appear.
2. Press the ADJUST buttons to select **Program to record**. Press ENTER.
3. *Recap screen* will display for 4 seconds. While this screen is displayed, press the ADJUST buttons to place the cursor arrow next to the program you wish to change. Press ENTER. You will see the **Program to record** setting menu.
4. Press ENTER repeatedly to select the item you wish to change. Use the ADJUST buttons to change it. The press ENTER repeatedly to return the altered program to the *Recap screen*.
5. Press MENU twice to turn off the menus. Then press POWER to turn off the VCR. Make sure the programmed recording light is on.

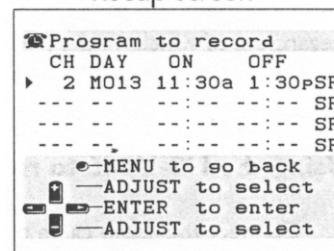
Recap screen



Canceling a Timer Recording before the Recording Starts

1. Press MENU on the remote control. Your VCR will turn on and **VCR Main Menu** will appear on your screen. Use the ADJUST buttons on the remote control to select **Program to record**. Press ENTER.
2. *Recap screen* will display for 4 seconds. While this screen is displayed, press the ADJUST buttons to place the cursor next to the program you wish to cancel.
3. Press CANCEL. The program is erased.
4. Press MENU twice to turn off the menus.

Recap screen



Memory Backup

If the VCR is without power for 3 minutes or less, it will retain the clock and the programmed settings. The VCR must have been plugged in for at least an hour beforehand to charge this backup. If the power is lost for more than 3 minutes, the time and the programmed settings will be lost.

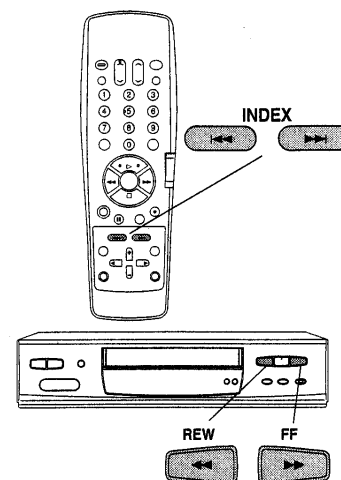
ADVANCED PLAYBACK CONTROLS

Special Effects

You can use FF and RW on the front panel, or the **|◀◀** and **▶▶|** on the remote to control the playback speed of the tape.

Using the FF and REW on the Front Panel to Control the Playback Speed

1. While the VCR is playing a tape, press PAUSE to freeze the picture.
2. Press the FF or REW on the front panel. Each press of FF changes the playback speed by one step in the forward direction. Each press of REW changes the speed by one step in the reverse direction. (See the chart below.)
3. To resume normal playback, press PLAY.



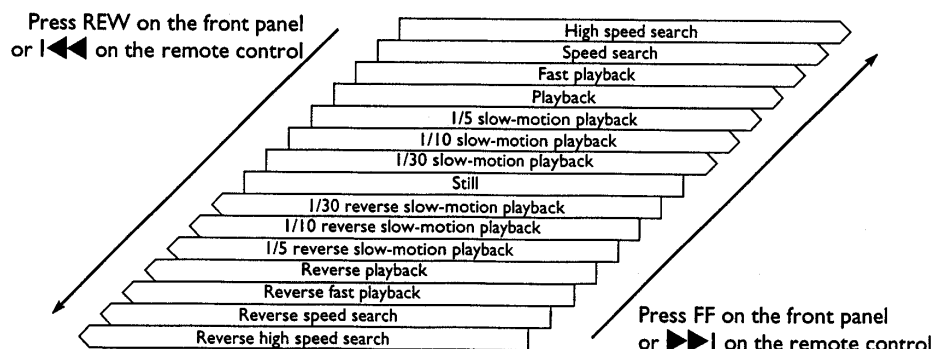
Using **|◀◀** and **▶▶|** on the Remote to Control the Playback Speed

1. While the VCR is playing a tape, press **|◀◀** or **▶▶|** on the remote control. Each press of **▶▶|** changes the playback speed by one step in the forward direction.

Each press of **▶▶|** changes the speed by one step in the reverse direction. (See the chart below.)

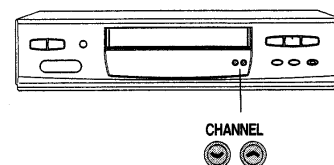
2. To resume normal playback, press PLAY.

After about 5 minutes in the still or slow-motion mode, the VCR will automatically stop to avoid damage to the tape. The picture may vibrate vertically when you pause the VCR's picture.



Still Adjustment

Sometimes during still frame, the picture may vibrate or shake. To correct this problem, press CHANNEL on the front panel until vibration is reduced or stops. Side-to-side vibration cannot be corrected.

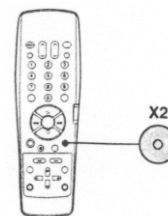


ADVANCED PLAYBACK CONTROLS, continued

Double Speed Playback

You can see the contents of the videotape in double speed playback.

1. While the VCR is playing a tape, press X2. You'll see the picture in double speed playback. The sound will be muted. A certain amount of noise in the picture is normal.
2. To resume normal playback, press PLAY.



ADJUSTING THE TRACKING

Automatic Tracking

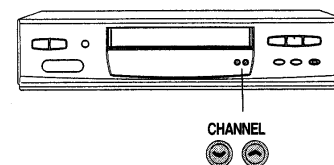
When you start playback of a newly inserted tape, your VCR automatically adjusts the tape to give you the best quality picture.

A certain amount of "noise" in the picture or sound is normal while the VCR is tracking a tape.

Manual Tracking

From time to time, you might play a tape that has excess noise in the picture, often looking like vibration or interference at the top or bottom of the screen. To correct the picture, you have to manually track the tape.

1. While the tape is playing, press CHANNEL on the front panel until the picture is clear of excess noise.
2. To continue automatic tracking, press both front panel CHANNEL buttons at the same time. Automatic tracking will also resume when you eject the tape.

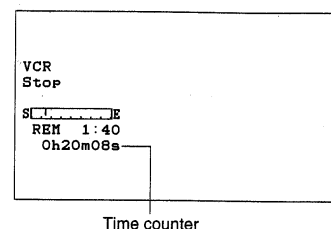


Slow Tracking

Slow tracking is used to adjust the playback quality during slow motion playback and still frame. You can only use slow tracking if you tape was recorded in extended play (EP) speed. To adjust the slow tracking, put a tape into slow motion, then press CHANNEL on the front panel until best picture is obtained.

TIME COUNTER

Your VCR has a time counter that shows the amount of time the tape has run in hours, minutes, and seconds. This counter is useful when you want to find specific points on a tape. The counter will not work when playing blank tapes or on blank sections of tape, or when the VCR's power is OFF.



Setting the Counter

To set the counter to "0h00m00s," press CANCEL on the remote control.

You cannot reset the counter if you are using the VCR's menus.

The counter will reset to "- h - - m - - s" when you eject a tape. When you load a tape again, the counter will display "0h00m00s."

SEARCHING TECHNIQUES

The VCR lets you search through a tape in a number of ways, including:

Quick search (CM skip) – 30 second intervals

Speed search – visually search

Counter zero stop – direct to start of recording

Index search – find specific index points

Search to blank – find the beginning of the blank section

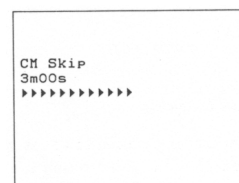
Quick Search (CM Skip)

Quick search lets you skip over the tape you are playing in about 30 second intervals. It is designed so that you can quickly speed through any commercials you may have recorded. To do this:

1. Make sure that you have set the VCR/TV slide switch on the remote control to the VCR position.
2. While playing a tape, choose the desired search time by pressing a number button.

Number button	1	2	3	4	5	6
Search time	30 sec.	1 min.	1 min 30 sec.	2 min.	2 min. 30 sec.	3 min.

The VCR will speed through the selected length of tape, then resume playback. This screen will show the search time and the gauge. Each mark on the gauge represents 15 seconds. The marks will disappear, one by one, every 15 seconds of the search time. You can select a search time up to 3 minutes.

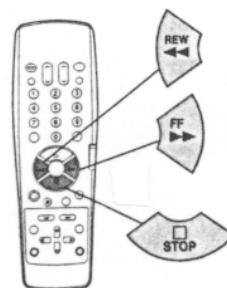


SEARCHING TECHNIQUES, continued

Speed Search

Use speed search to visually search through the contents of a videotape.

1. While playing a tape, press FF or REW on the front panel or on the remote control. You will see the picture as it fast forwards or rewinds. Noise bars may appear in the pictures.
2. If you press FF or REW and hold it down for about 1 second, the search speed will increase.
3. To resume normal playback, press FF or REW again quickly, or press PLAY.



IMPORTANT: The fastest search speed that allows you to see the picture is about 30 times normal speed. It is normal for the number of noise bars on the screen to increase and roll from top to bottom as the visual search speed increases. Using speed search for long stretches of tape may cause the video heads to become dirty faster.

The **fastest way to move through the tape** is without a picture, which allows you to search up to 500 times normal speed. To do this, press STOP, then FF or REW. If you press and hold FF or REW for more than **2** seconds, the search speed will slow to 330 times normal speed.

In order to protect your tapes and the VCR heads, the Fast Forwarding/Rewinding speed will be slower than 500x under the following conditions:

1. Use of tapes shorter in length than T-120 (for example, T-30, T-60, T-90).
2. Activating fast forwarding or rewinding from the middle of the tape.

Counter Zero Stop

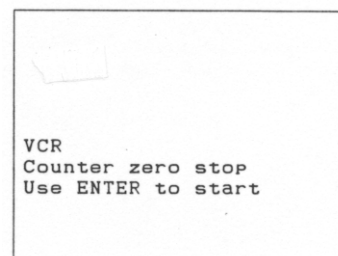
Counter zero stop allows you to quickly access the beginning of a recorded or playback section of a tape. The counter zero stop will automatically fast forward or rewind the tape to "0h00m00s and stop.

SEARCHING TECHNIQUES, continued

Counter Zero Stop, continued

1. Press CANCEL on the remote control at the point you wish to locate later. The counter will reset to "0h00m00s."
2. When you wish to return to the point specified in step 1, press AUDIO/VIDEO on the remote control. The function menu appears on your screen. Press AUDIO/VIDEO until the *Counter zero stop* function appears.
3. Press ENTER to start the counter zero stop.

The VCR will automatically search to the counter "0h00m00s" and then stop. The counter may stop slightly before or after "0h00m00s."



Index Search

Index search is a way to find specific points on a tape. Before using index search, index marks are placed at important places on a tape. Index search is used to find these marks. Index marks are added automatically whenever your VCR starts a new recording; you can also add index marks manually at any point during recording.

Automatic Index Marks

Whenever recording is begun from the STOP mode, an index mark is automatically added to the tape. A message will indicate that the mark is being recorded.

Index marks are not added when you press PAUSE or REC to begin recording from the record-pause mode.

Manual Index Marks

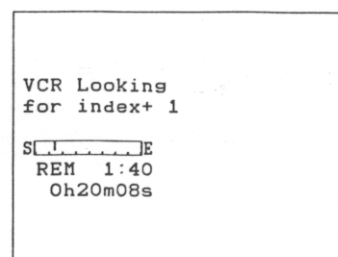
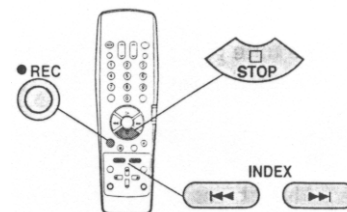
To add an index mark yourself, press REC on the remote control while a tape is recording.

Searching index marks must be added at least one minute apart.

1. When the tape is stopped, press INDEX ►► to begin a forward search; press INDEX ◄◄ to search in reverse. The VCR will fast forward or rewind and an index search display appears on the TV.

Once the VCR finds an index mark, it will begin playing back the tape from that point.

2. You can press INDEX ►► or INDEX ◄◄ up to 19 times to search for that manual index marks. For example, to find the third index mark ahead, press INDEX ►► three times. The on-screen display will count down the number of marks to be passed before playback begins.
3. To cancel index search, press PLAY or STOP.

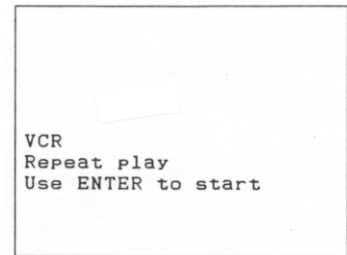


SEARCHING TECHNIQUES, continued

Repeat Playback

You can playback a section of tape over and over using repeat playback. The tape will play until the next index mark, rewind to the previous index mark, and resume playing. If there is only one index mark on the tape, then the VCR will play or rewind to that mark and resume playback. If there is no index mark, the entire cassette will repeat.

1. Press AUDIO/VIDEO on the remote control to display the function menu. Press AUDIO/VIDEO until the *Repeat play* function appears.
2. To start the playback, press ENTER. When the VCR encounters the next mark or the end of the tape, it will automatically rewind to the previous mark and begin playback again. The VCR will also search for a blank section of tape. If the VCR encounters any blank sections longer than 4 seconds in length, the repeat playback will begin.
3. Press STOP to cancel the repeat.



IMPORTANT: While the VCR is rewinding to the beginning of the tape, you cannot use repeat playback, counter zero stop, or index search.

DISPLAYING THE TIME GAUGE AND THE REMAINING TIME

The time gauge is a graphic representation of your position on a video tape. The left side of the gauge is the tape start (S), and the right side is the tape end (E). For a T-120 length tape played at standard speed (SP), each mark on the gauge represents about 15 minutes. The remaining time display shows the time, in hours and minutes, left until the end of a tape.

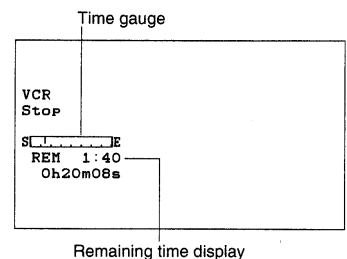
The time gauge and remaining time automatically appear during:

- fast forward and rewind (from a stopped tape),
- counter zero stop,
- index searches, and
- rewinding for repeat playback.

Turn off the time gauge and the remaining time by pressing DISPLAY twice.

To make the time gauge and the remaining time appear, press DISPLAY once. The time gauge and remaining time appear on the monitor. They disappear after 4 seconds when playing a tape.

To turn off the display, press DISPLAY twice.



DISPLAYING THE TIME GAUGE AND THE REMAINING TIME, continued



IMPORTANT: The time gauge and remaining time work by detecting control signals on recorded tapes. Therefore, they do not function while playing blank tapes.

The remaining time display may not show the correct remaining time:

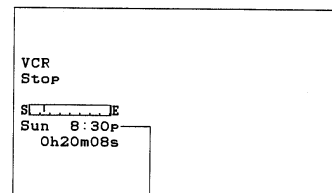
- if the **Tape** function is incorrectly set,
- if you are using speed search,
- if you are using a special length cassette (such as T-10 length), or
- if you are using a VHS-C tape with an adapter.

The remaining time display may not work correctly depending on your tape.

DISPLAYING THE CURRENT TIME

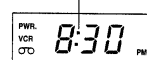
The current time is shown in the front panel display or the monitor. If you have not set the clock, or if there has been a power failure longer than 3 minutes, the display will show -- : -- . To see the current time when the VCR is on:

1. Press DISPLAY twice. The remaining time display will be replaced by the current time.
2. To turn off the current time, press DISPLAY again.



Current time display

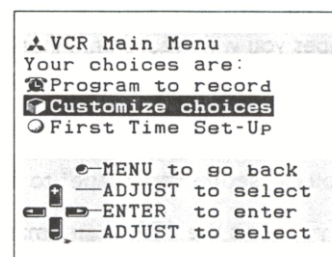
Current time display



CUSTOMIZE CHOICES MENU

In the **Customize Choices** menu, five options can be set. (Some menu options have been disabled.) For each of the options, start with these 2 steps:

1. Press MENU on the remote control. **VCR Main Menu** appears on your monitor.
2. Use the ADJUST buttons on the remote to select **Customize choices**. Press ENTER.

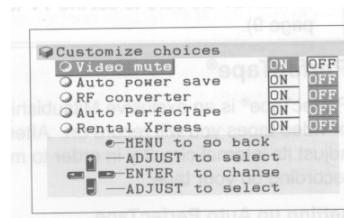


CUSTOMIZE CHOICES MENU, continued

Video Mute

When the Auto Power Save feature is turned on, the VCR will automatically turn off after remaining idle for 30 minutes. If a control, such as a menu function, is used or if there is a tape playing or being recorded, the VCR will remain on.

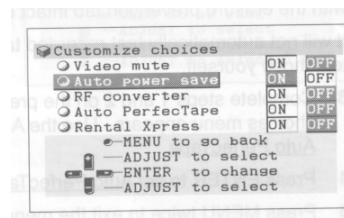
1. From the **Customize Choices** menu, use the ADJUST buttons to select *Auto power save*. Press ENTER to set to ON.
2. Press MENU twice to turn off the menus.



Auto Power Save (Auto Off)

When the Auto Power Save feature is turned on, the VCR will automatically turn off after remaining idle for 30 minutes. If a control, such as a menu function, is used or if there is a tape playing or being recorded, the VCR will remain on.

3. From the **Customize Choices** menu, use the ADJUST buttons to select *Auto power save*. Press ENTER to set to ON.
4. Press MENU twice to turn off the menus.



PerfectTape®

PerfectTape® tests the quality of video tapes you will record on. After each test, the VCR will adjust its internal circuitry in order to make the best possible recording on your tape.

Setting up PerfectTape®

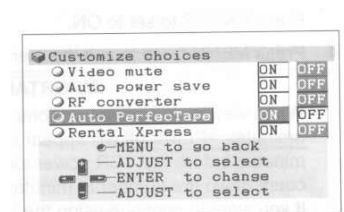
You can set up PerfectTape® to function two ways.

If you want the VCR to automatically test any non-recorded tapes when the tape is loaded, select Auto PerfectTape to ON.

If you do not want the VCR to automatically test tapes, select OFF. PerfectTape® will now function only when you start a test. Any tape with the erasure prevention tab intact can be manually tested.

It will not automatically test recorded tapes – you must choose to tape those yourself.

1. From the **Customize Choices** menu, use the ADJUST buttons to select PerfectTape.
2. Press ENTER to set PerfectTape to AUTO or MANUAL.
3. Press MENU twice to turn off the menus.

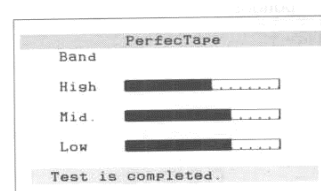


CUSTOMIZE CHOICES MENU, continued

Using PerfectTape® Automatically

1. Load a tape that has not been recorded into the VCR.

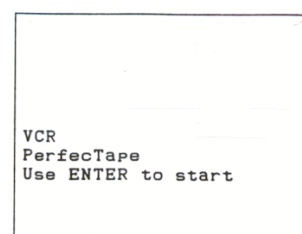
The VCR will display the testing status screen. When testing, the VCR records for one second, then evaluates the recording it made. The entire test takes about 8 seconds. If you wish to cancel the test, press STOP on the remote.



When the test is done, the VCR will display the rating of your tape for 8 seconds, indicating that the VCR has set its internal circuitry to make the best possible recording on this tape.

Using PerfectTape® Manually

1. Load a tape that has its erasure prevention tab intact into the VCR.
2. Find a portion of the tape that is OK to record over; this feature will record over one second of your tape.
3. Press AUDIO/VIDEO on the remote control. Function menu appears. Press AUDIO/VIDEO until the PerfectTape function appears.
4. Press ENTER on the remote to begin the test. To cancel the test, press STOP on the remote.



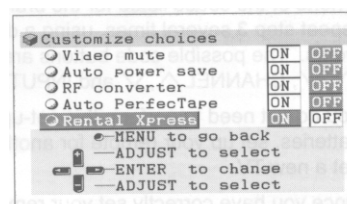
When the test is finished, the VCR will display the rating of your tape for 8 seconds. Turn off the display by pressing STOP on the remote control.

If you wish to erase the settings, eject the tape. The settings will also be erased if the VCR loses power. After the test is finished, the PerfectTape function will not appear unless the tape is ejected.

Rental Xpress

When activated, the Rental Xpress feature will automatically rewind the tape to the beginning, then eject and power off the VCR after it has reached a blank section of 30 seconds or longer on any tape with the erasure prevention tab removed. To activate this feature:

1. Press MENU on the remote control. **VCR Main Menu** appears on your monitor.
2. Use the ADJUST buttons on the remote to select *Customize choices*. Press ENTER.
3. **Customize choices** menu appears.
4. Press the ADJUST buttons to select *Rental Xpress*. Press ENTER to select ON or OFF.
5. Press MENU twice to turn off the menus.

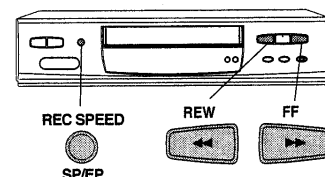


VCR-B SIGNALS

The KR4008EN VCR has two operational settings: VCR-A and VCR-B. Both signals are available so that you may separately control two VCRs that are placed closely together. The remote control for this VCR will only send VCR-A signals. By setting the KR4008EN to respond to VCR-B signals, you will NOT be able to use the remote control unit. Other remotes are capable of sending both VCR-A and VCR-B signals.

To program the KR4008EN and remote to VCR-B

Make sure that the KR4008EN is plugged in but turned OFF. On the VCR front, press REC SPEED and REW at the same time. To confirm that the VCR responds to VCR-B signals, **b** appears on the front panel display.



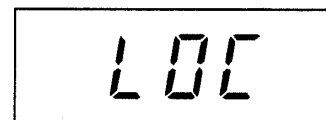
To reprogram the KR4008EN and remote to VCR-A

Make sure that the KR4008EN is plugged in but turned OFF. On the VCR front, press SP/EP and FF at the same time. To confirm that the VCR responds to VCR-A signals, **A** appears on the front panel display.

LOCK MODE

The lock mode prevents others from using your VCR. To lock the VCR:

1. Press and hold down DISPLAY on the remote control for approximately 8 seconds. LOC will display on the front panel. When the lock feature is in use, LOC display will reappear when you press any of the buttons.
2. To cancel the lock, press and hold down DISPLAY for 8 seconds. The LOC display will reappear when DISPLAY is pressed. When you hold down this button, it will go out to show the lock is cancelled.



IMPORTANT: You can lock the VCR with the power off, even if the VCR is standing by for a programmed recording. If you lock the VCR with no cassette in it, the VCR will not accept a cassette.

SECTION 4: TROUBLESHOOTING AND MAINTENANCE

TROUBLESHOOTING

If problems occur, verify the installation of the VCR with the instructions in this manual and with other operating equipment. Isolate the problem to the specific piece of equipment in the system and refer to the equipment manual for further information.

If your VCR malfunctions, try the following steps prior to contacting your dealer:

1. Check the Trouble Checks on the next page to see if there is a solution listed for the problem you are experiencing.
2. If the problem is not address in Trouble Checks, the safety circuits on the VCR may be in operation. (The clock setting and the timer recording will be deleted.) Try the following:
 - a. If possible, press EJECT on the front panel of the VCR and remove the tape.
 - b. Unplug the power cord and leave it unplugged for 3 minutes or more and plug it in again.
 - c. If a tape is not loaded, press POWER to turn the power ON.
If a tape is loaded, the tape protecting function will work and "99" will appear on the front panel display to begin countdown. Wait about 1 minute until it reaches "00" to show the tape protecting function is completed; then press POWER.
3. You may also try the following procedures if the above steps did not resolve the problem. (All settings will be reset to the default settings.)
 - a. Press POWER on the front panel continuously for about 8 seconds until the current time display on the front panel shows "--:-- --".
 - b. If a tape is not loaded, press POWER to turn the power ON.
If a tape is loaded, wait about 1 minute until the tape protecting function is completed, then press POWER.

If the problem with your VCR persists, contact your dealer for assistance.

PREVENTIVE MAINTENANCE

Following the preventive maintenance schedule allows detection and correction of minor faults before they become serious and cause equipment failure.

Every three months, perform the following:

- A. Inspect all connecting cables for deterioration or other damage.
- B. Clean components with a clean damp cloth.
- C. Verify that all mounting hardware is secure.

TROUBLESHOOTING – TROUBLE CHECKS

PROBLEM	CHECK
The VCR won't turn on.	- Check the power cord and the AC outlet. - Is the lock function on? If so, press and hold DISPLAY on the remote for more than 8 seconds until the LOC display turns off.
The VCR power is on but no controls work.	- Is the LOCK light ON? If so, press and hold DISPLAY on the remote for more than 8 seconds until the LOCK light turns off. - Set the VCR/TV slide switch to the VCR position.
You can't see the VCR's picture on the monitor.	- Check the monitor's input settings. - Check to see that your VCR is not set to External.
VCR REC button doesn't function.	Check the erasure prevention tab on the tape cassette.
No picture during recording.	- Check the hookup. - Check to see if your monitor is set to the correct channel for input.
The VCR timer recording does not operate.	- Check that the programmed recording light lights up in the front panel display. - Check the clock time. - Make sure you have turned the VCR off before the start time.
Noise in the picture and distorted sound.	Check the tracking control. Adjust manually if necessary.
Poor or no Hi-Fi sound.	- Check the monitor settings. - Check the quality of the video tape.
Playback is noisy or "snowy."	- Clean the video heads using a dry-type video head cleaning cassette. Do not use a wet-type cleaning cassette as it may damage your VCR. Excessive use of a cleaning cassette could shorten head life. Follow the cleaning instructions carefully. - Have the VCR video heads cleaned by a qualified service technician.
VCR remote does not function.	- Check that VCR operational setting is set to VCR-A - Check to see that the VCR/TV slide switch is set to the correct position. - Change the batteries.
Fast forwarding/rewinding speed is slow.	- In order to protect your tapes and the VCR heads, the Fast Forwarding/Rewinding speed will be slower than 500x under the following conditions: - Use of tapes shorter in length than T-120 (for example, T-30, T-60, T-90) - Activating fast forwarding or rewinding from the middle of the tape.
Remote does not function	- Check that the batteries are correctly installed. - Change batteries. - Check to see that the VCR/TV slide switch is set to the correct position.
Remote does not function for VCR:	Check that the VCR operational setting is set to VCR-A.
Remote does not function for TV:	- Reset the TV brand button codes (see instructions). - Remember that due to variations among models, some or all buttons may not work, or they may operate different functions than expected for your particular TV.

SPECIFICATIONS

FORMAT	VHS NTSC standard with Hi-Fi audio
VIDEO SIGNAL SYSTEM	EIA standard; NTSC color
RECORD/PLAYBACK SYSTEM	Video – 4 heads Audio – 2 Hi-Fi channels and 1 monaural audio control
HORIZONTAL RESOLUTION	More than 220 lines (SP) More than 210 lines (EP)
SIGNAL-TO-NOISE-RATIO	More than 45 dB (SP) More than 46 dB (EP)
TIMER PROGRAM CAPACITY	1-month programmable / 8 programs
MEMORY BACKUP TIME	Approximately 3 minutes
MAXIMUM RECORDING TIME (T-120 TAPE)	120 minutes with T-120 video cassette (SP) 360 minutes with T-120 video cassette (EP)
REWIND TIME	Approximately 43 seconds for T-120 cassette (full recorded tape)
POWER REQUIREMENT	120V AC, 60 Hz
POWER CONSUMPTION	20 Watts – 3.0 Watts standby
DIMENSIONS	3-5/8H x 16-3/4W x 11-13/16D inches (93H x 425W x 298D mm)
WEIGHT	Approximately 8.0 lbs. (3.6kg)